

Photonic Crystals: Characterization, Modeling, and Design

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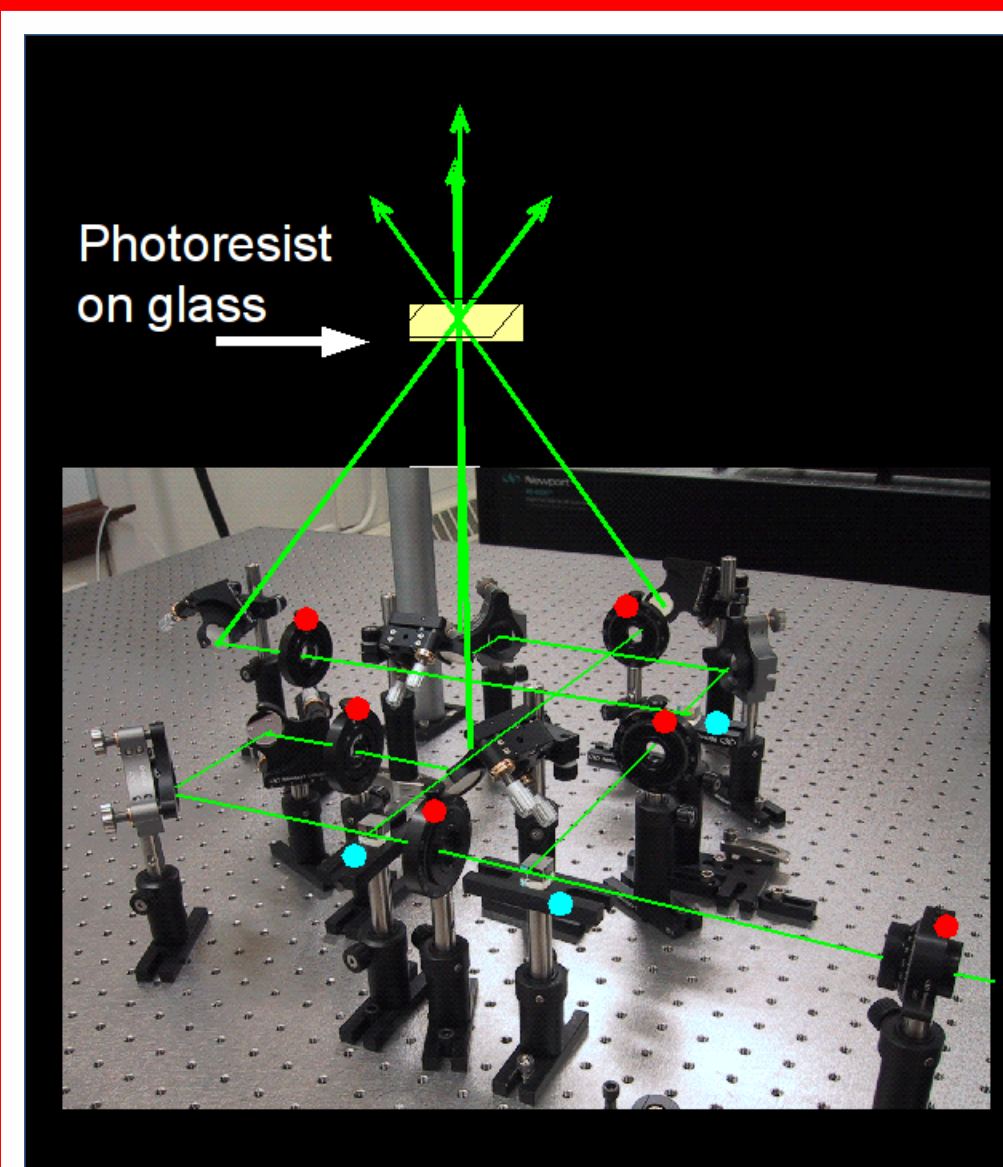
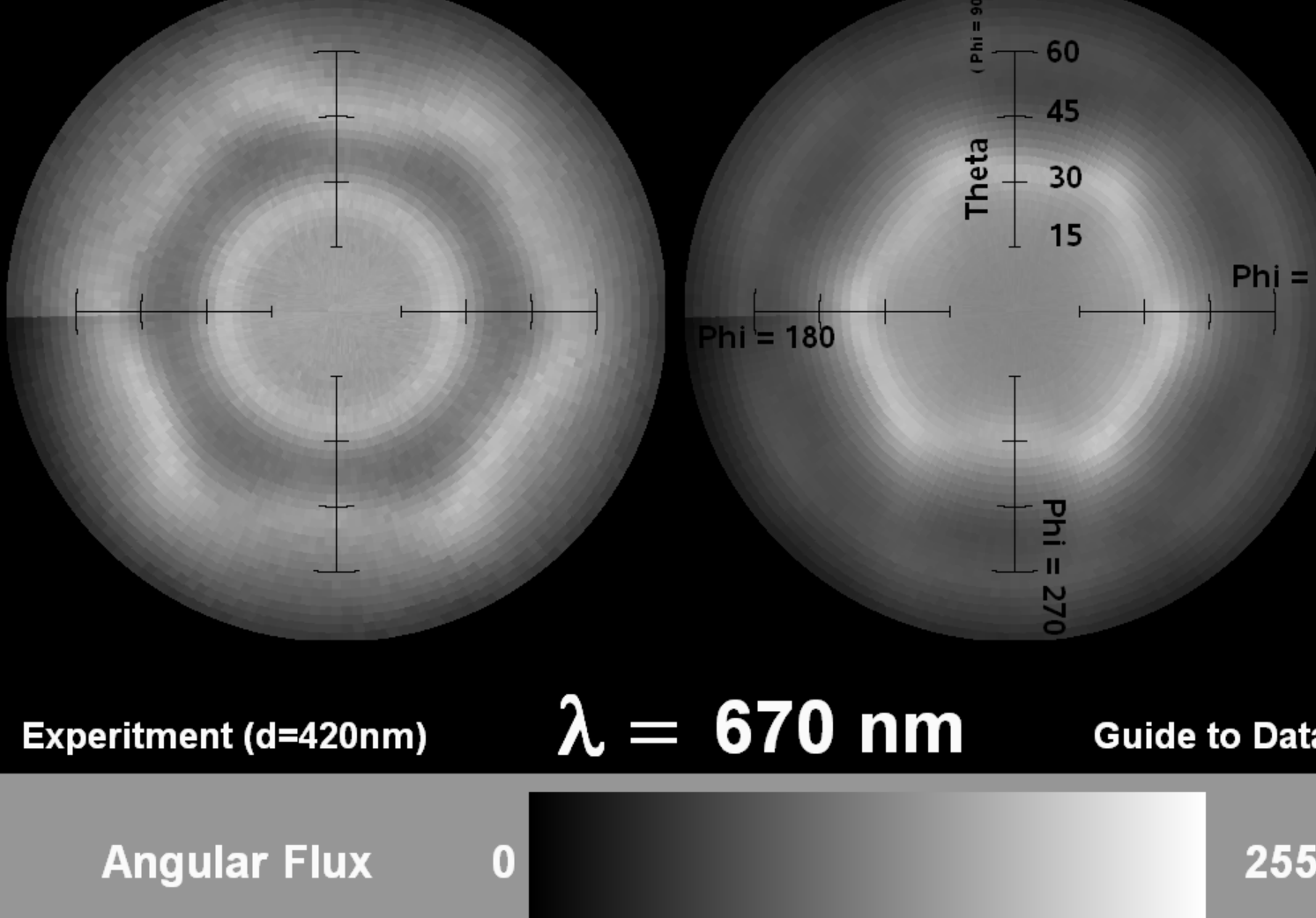
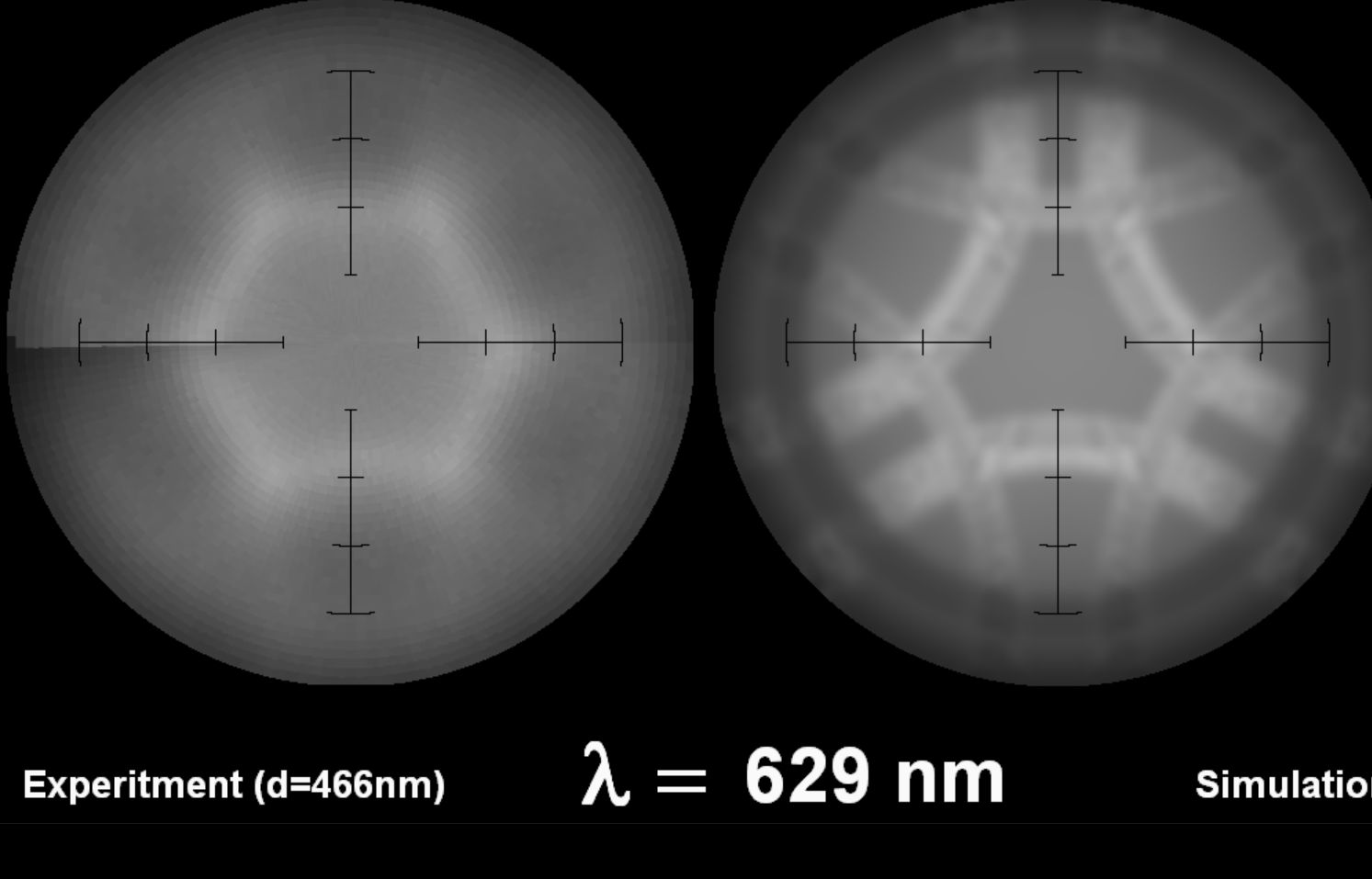
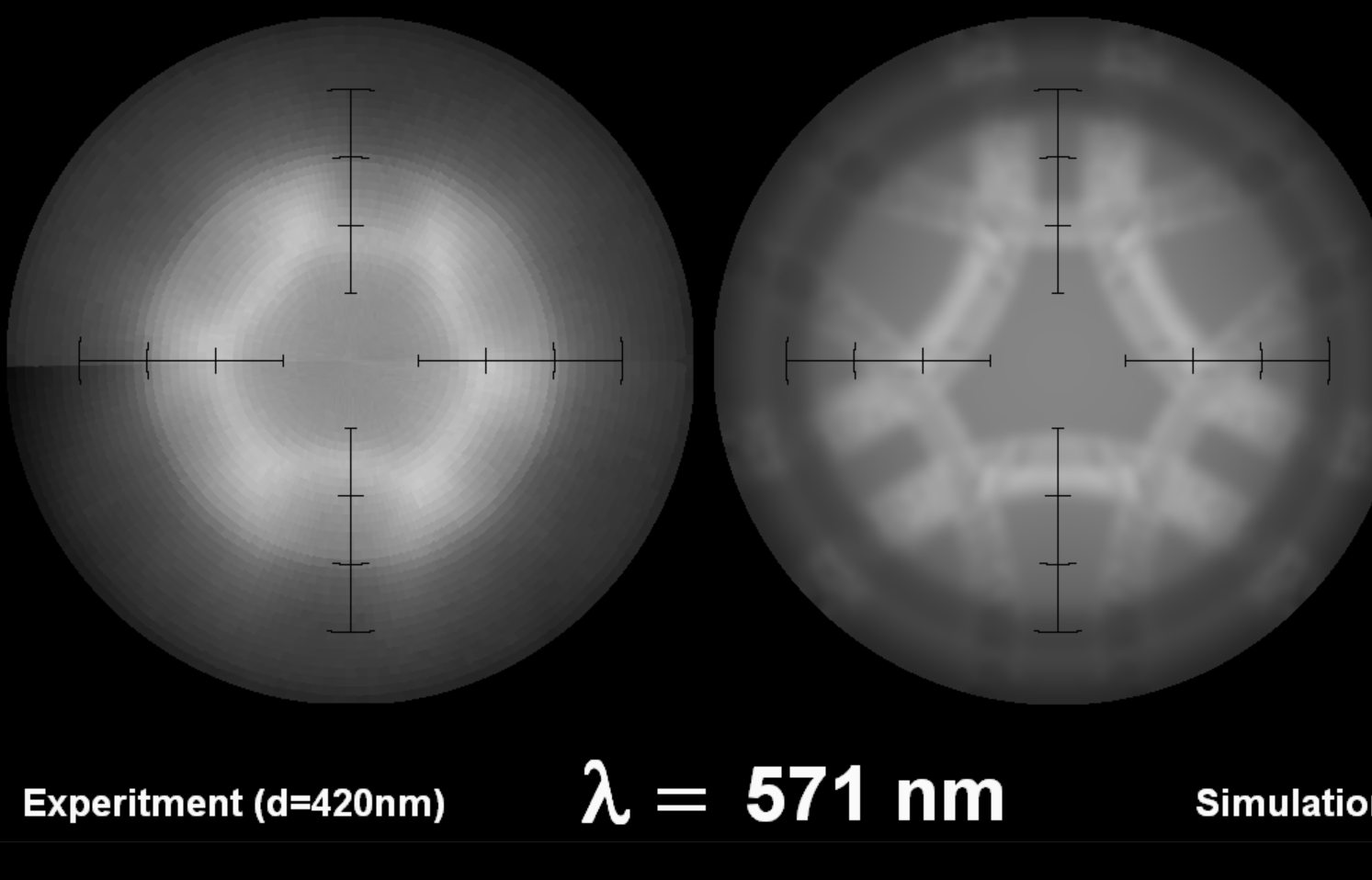
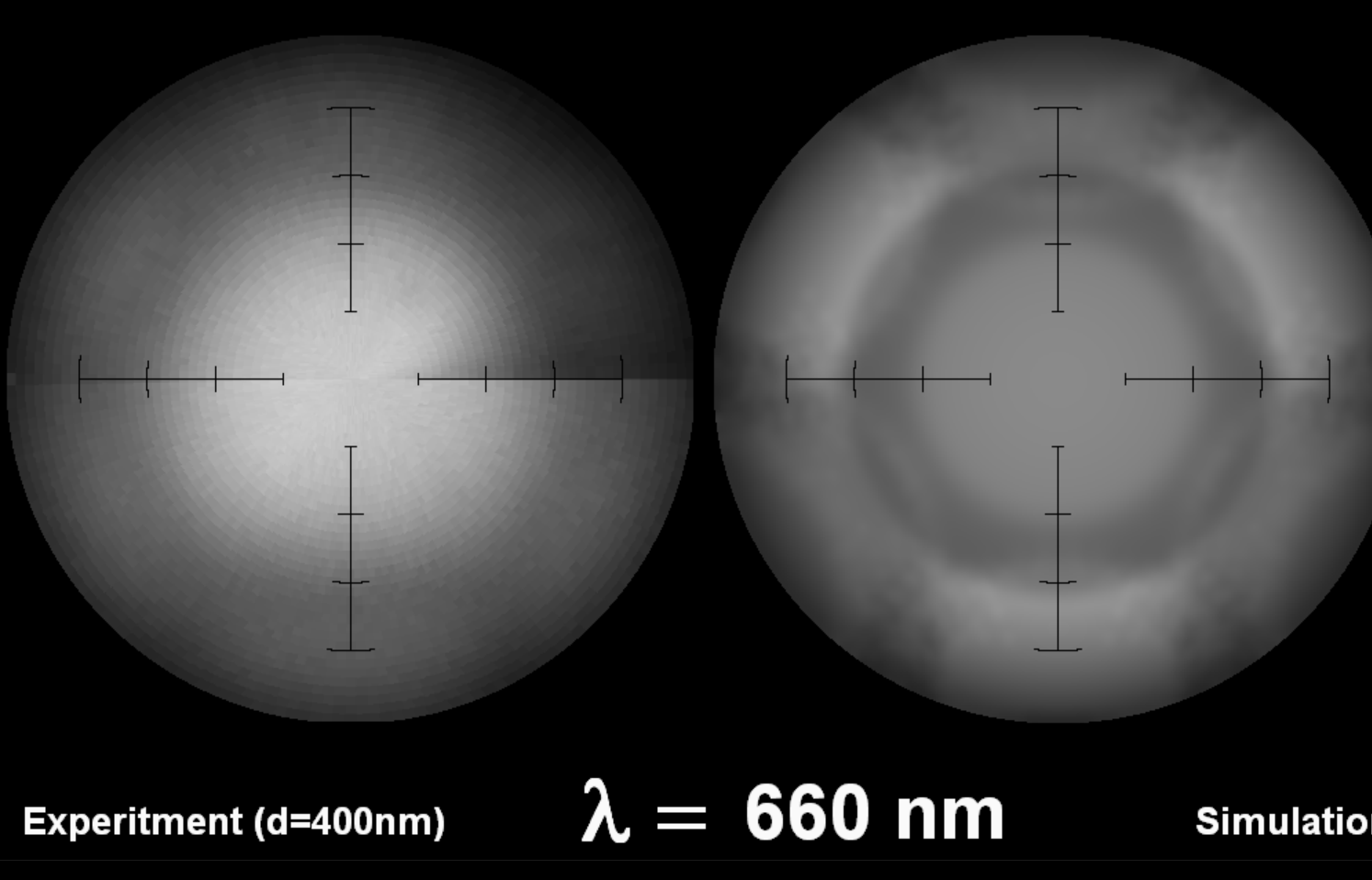
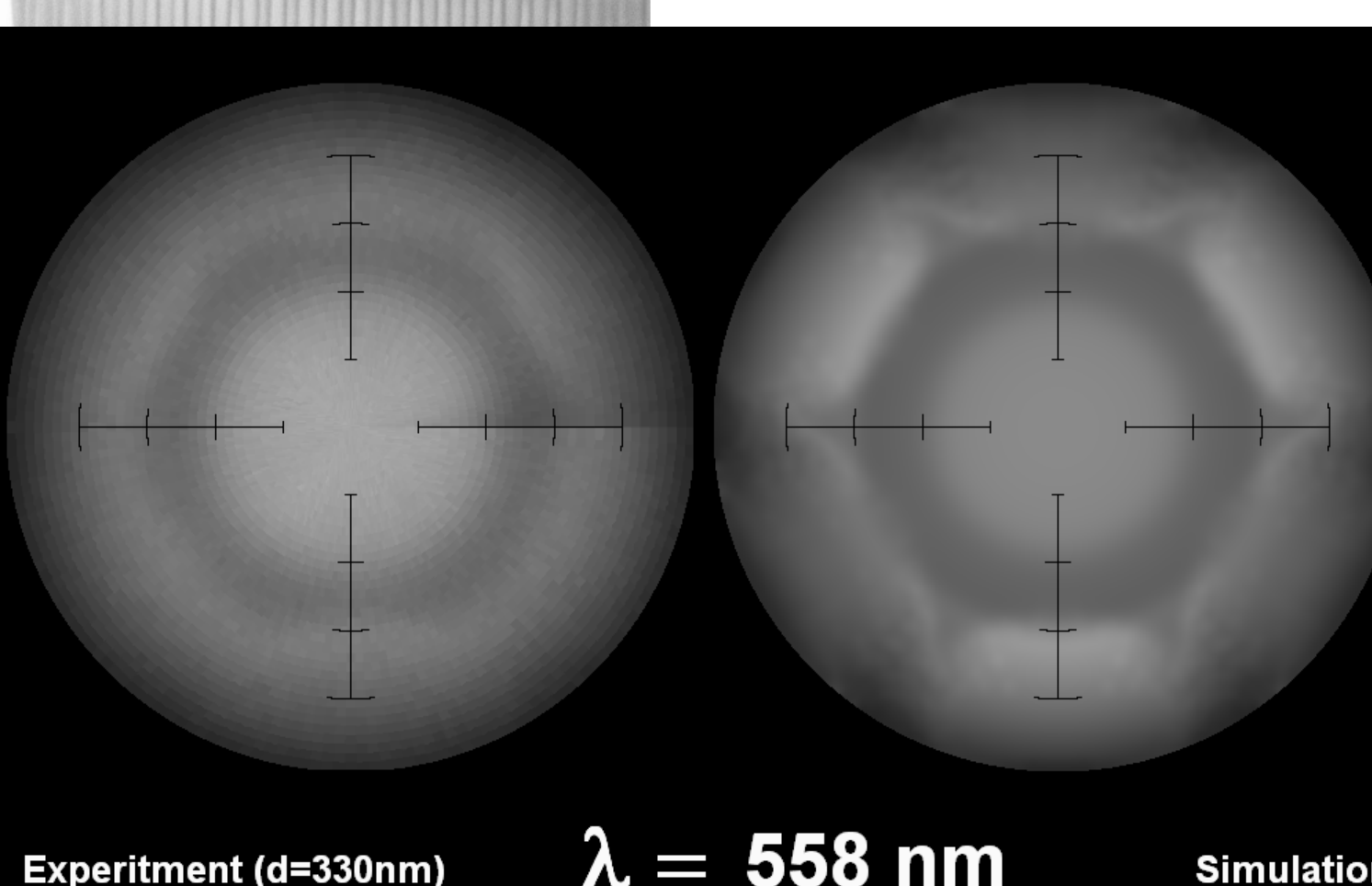
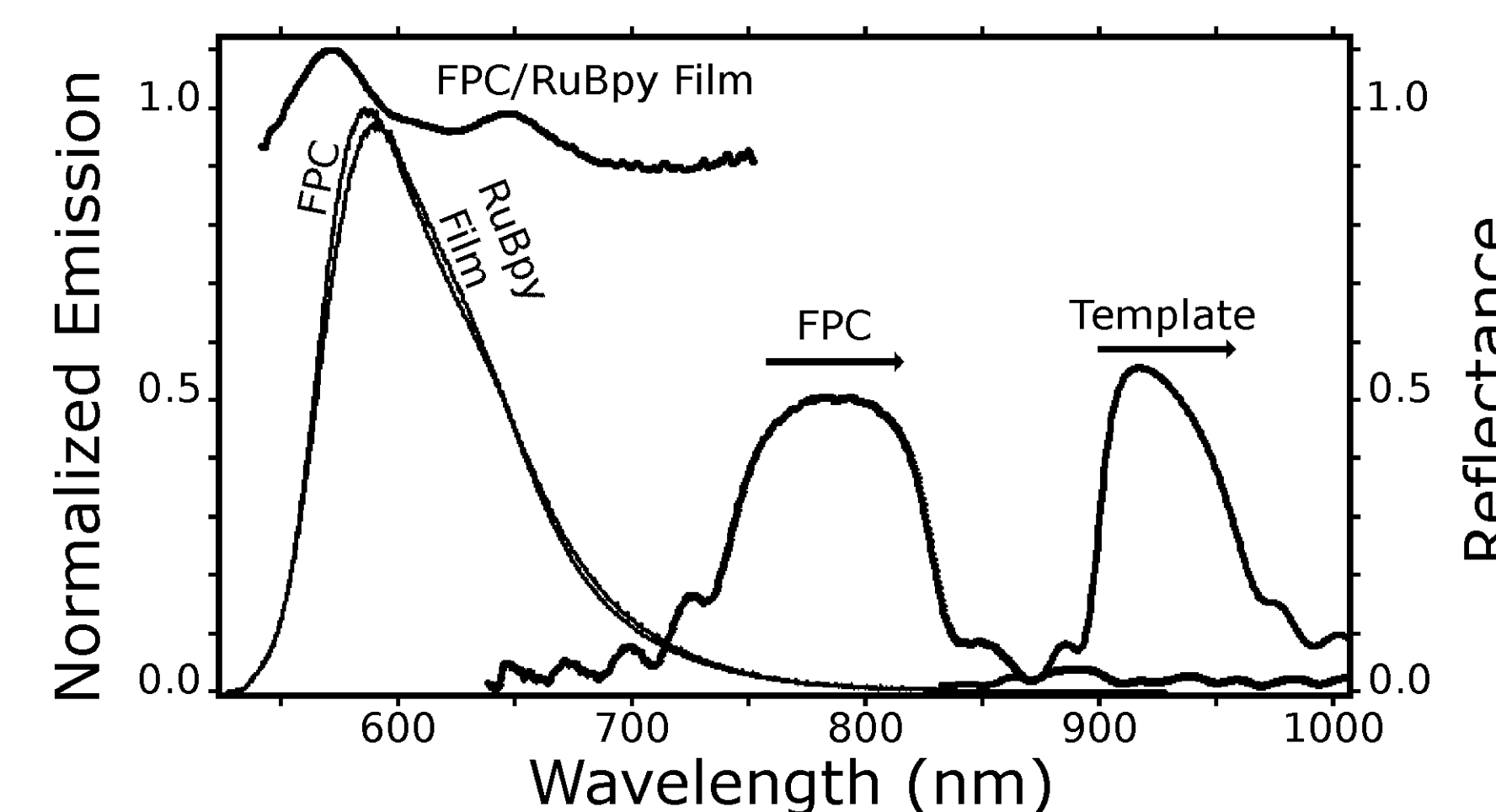
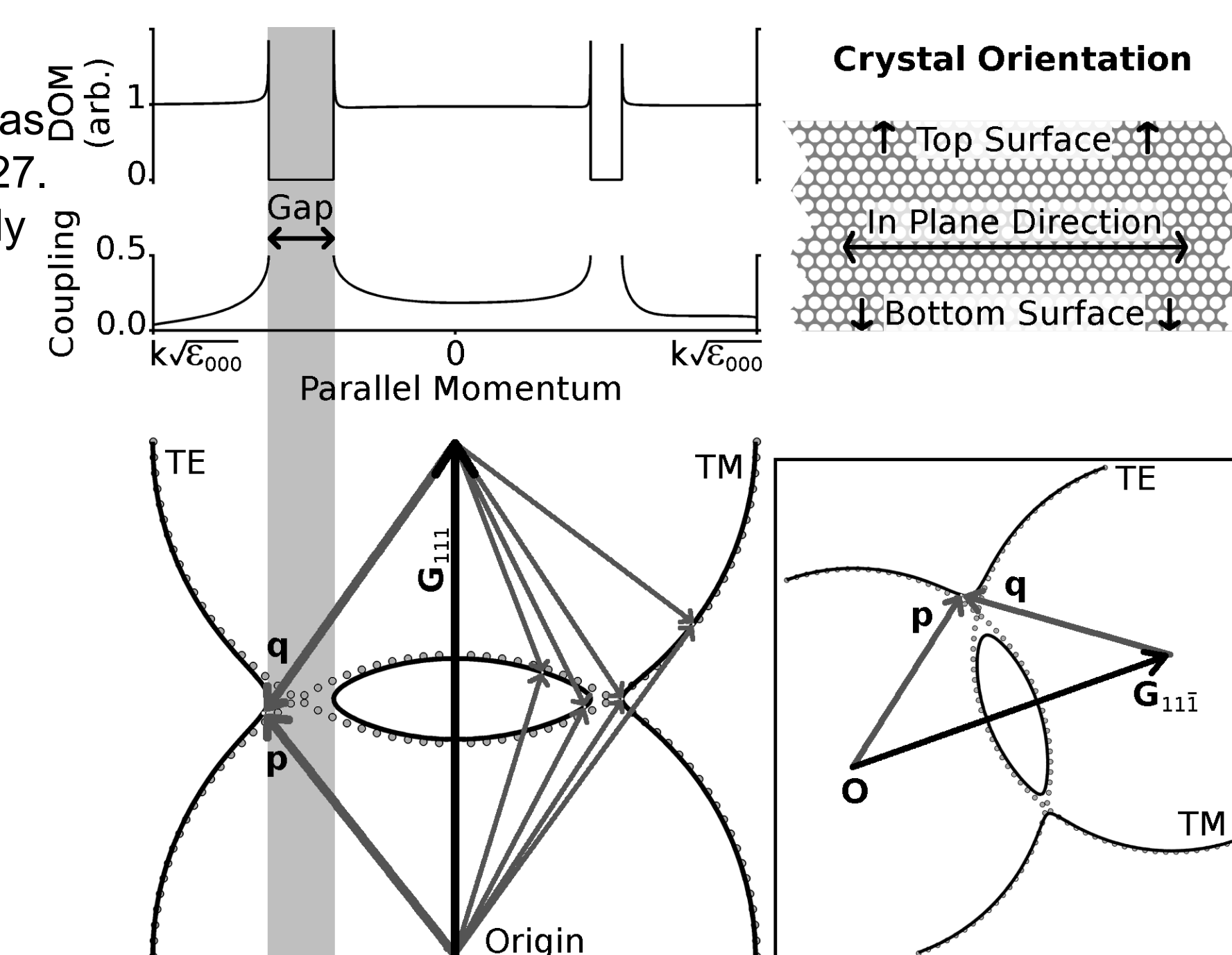
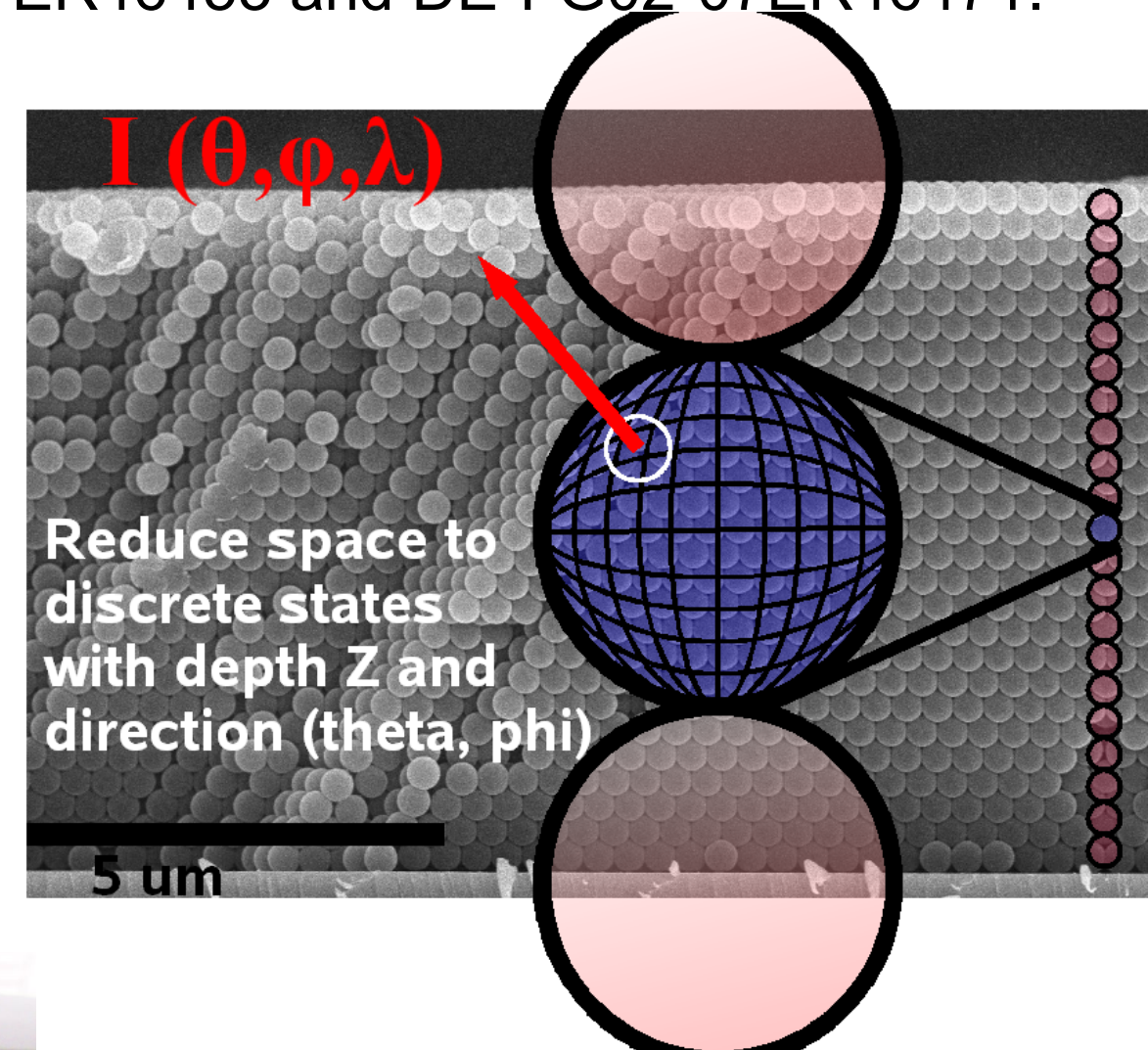
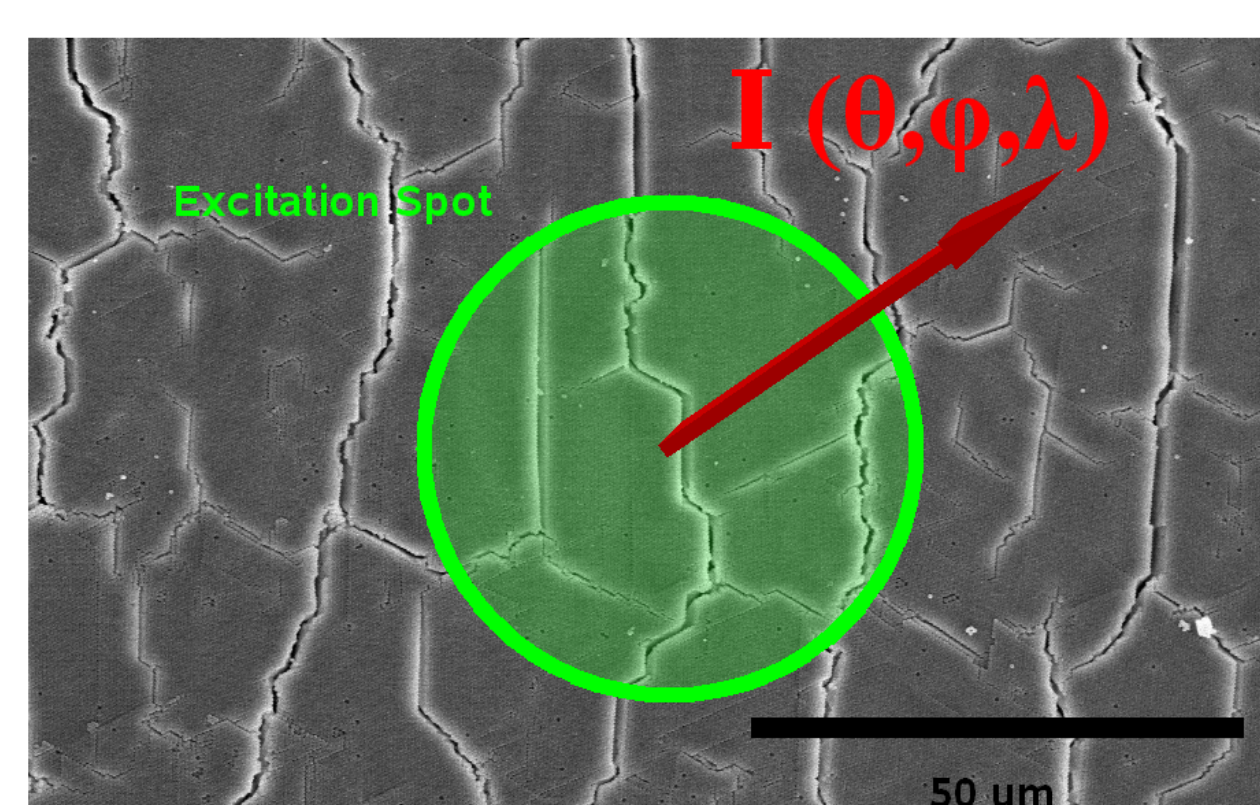
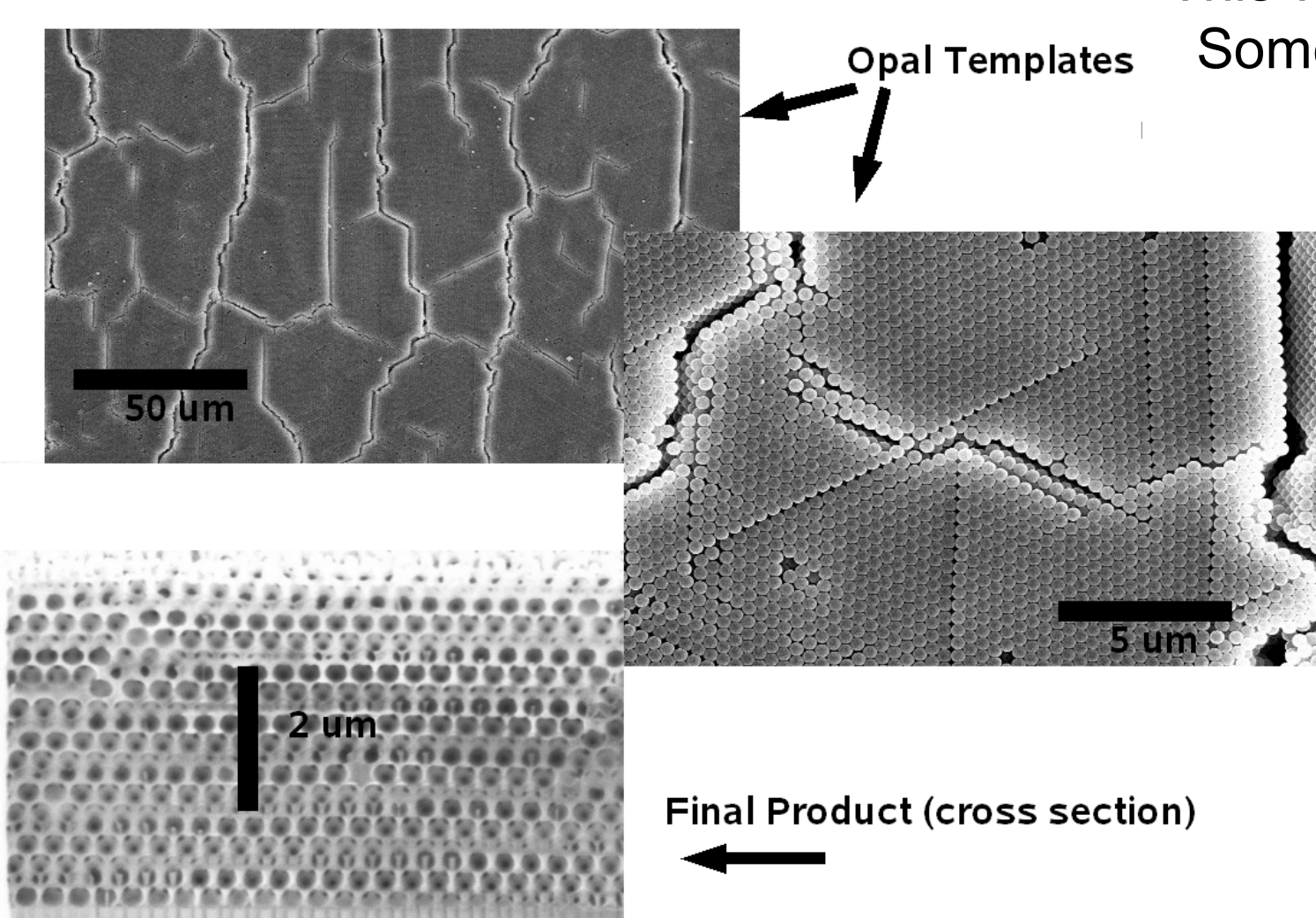
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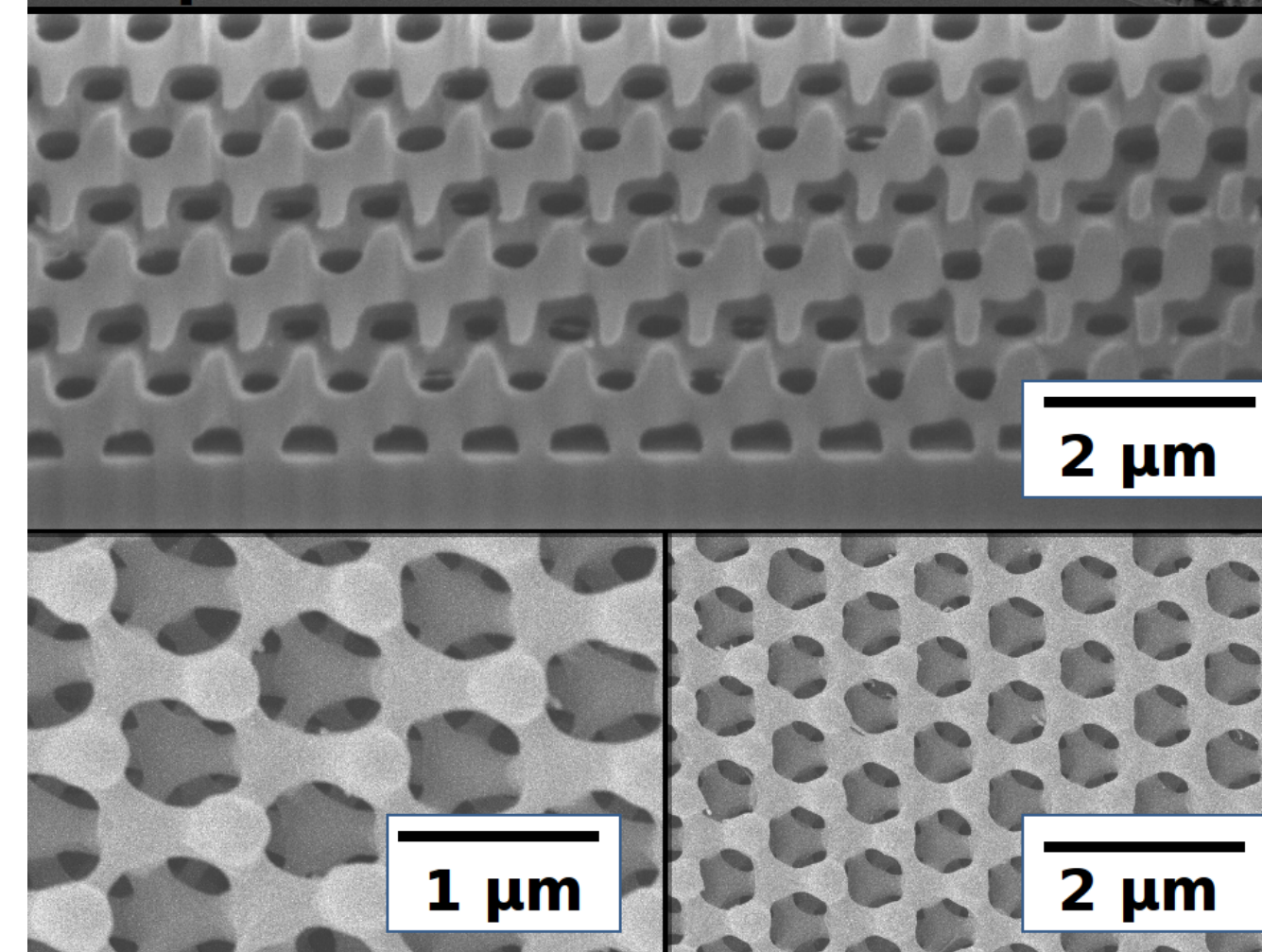
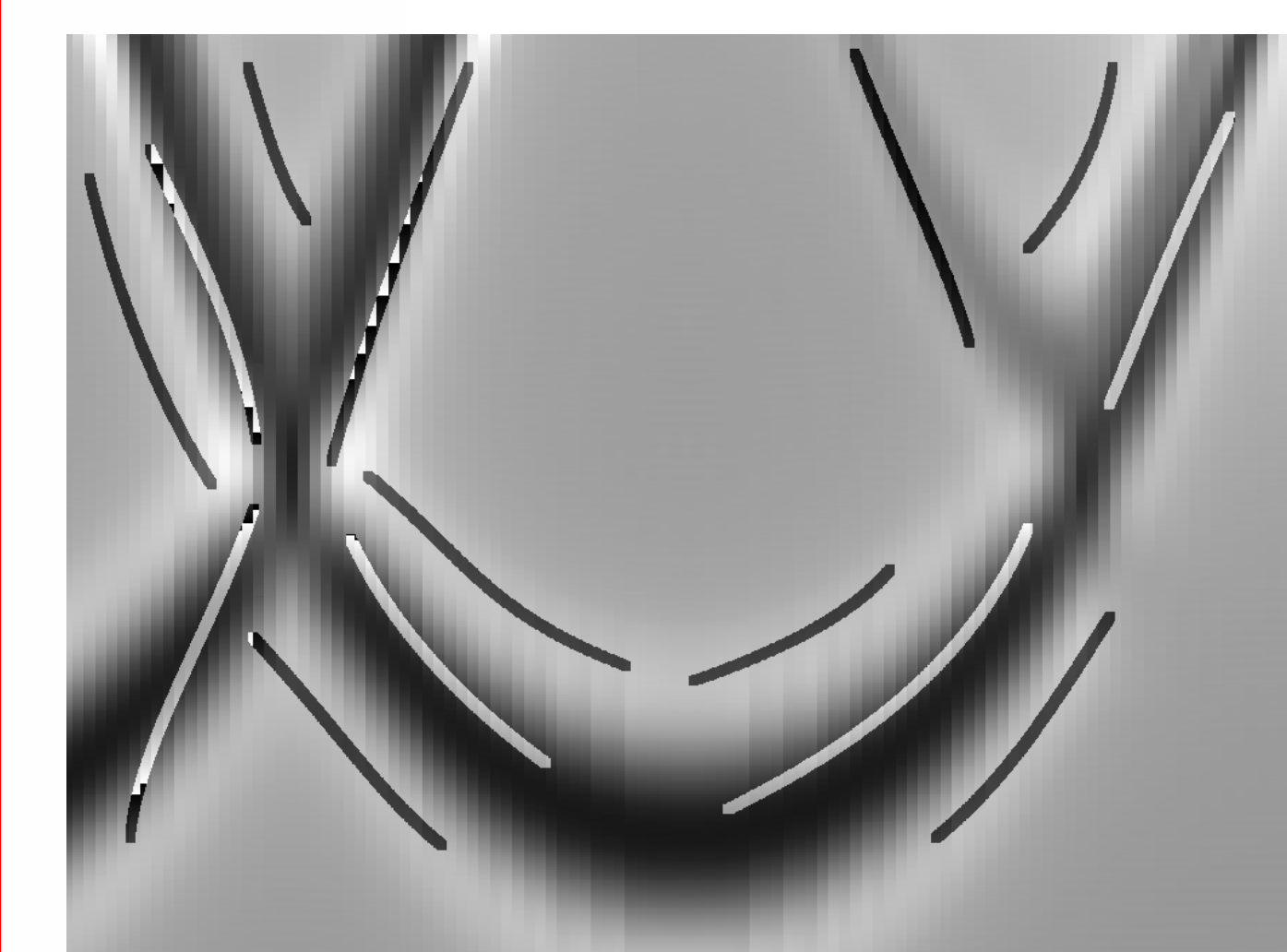
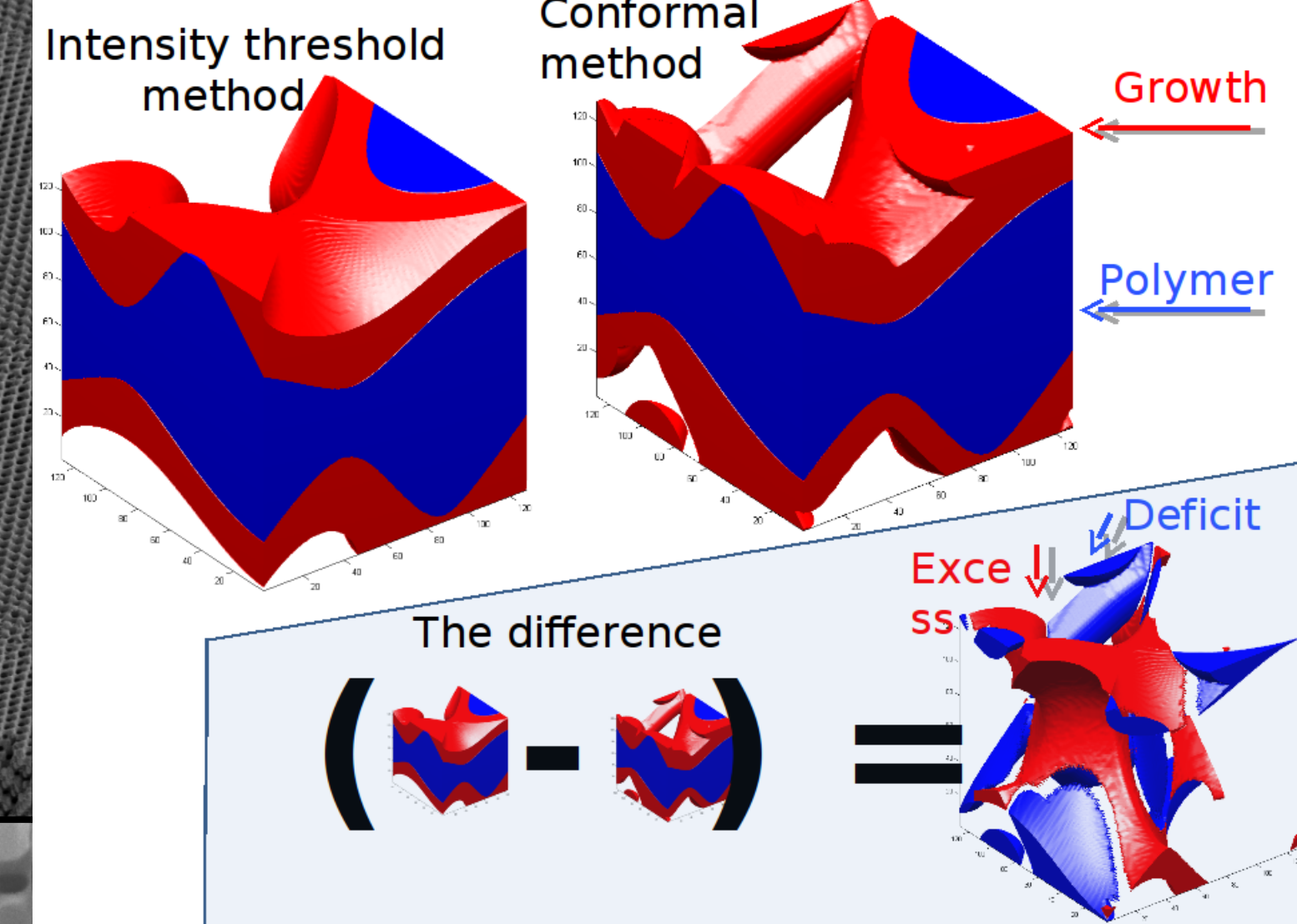
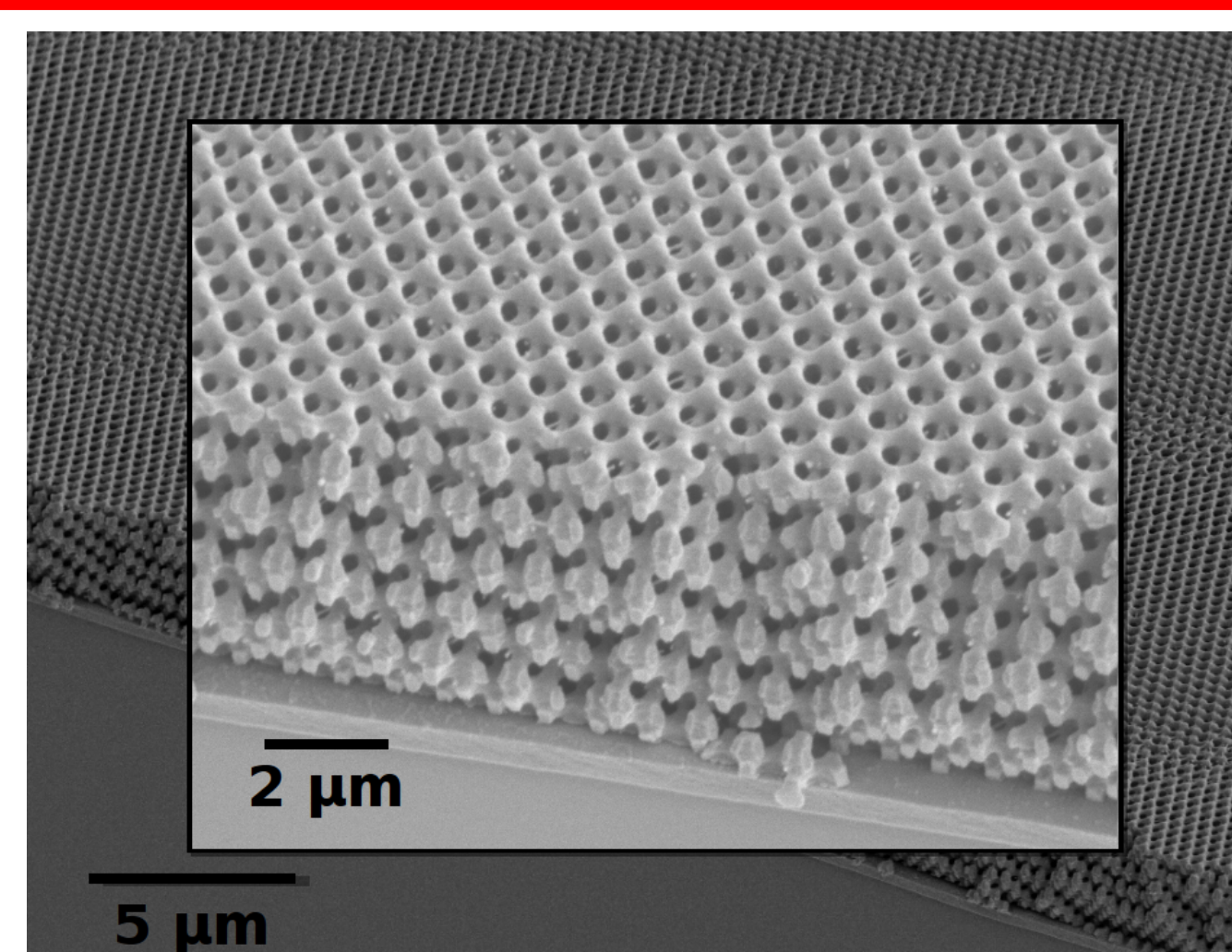


Interference Lithography

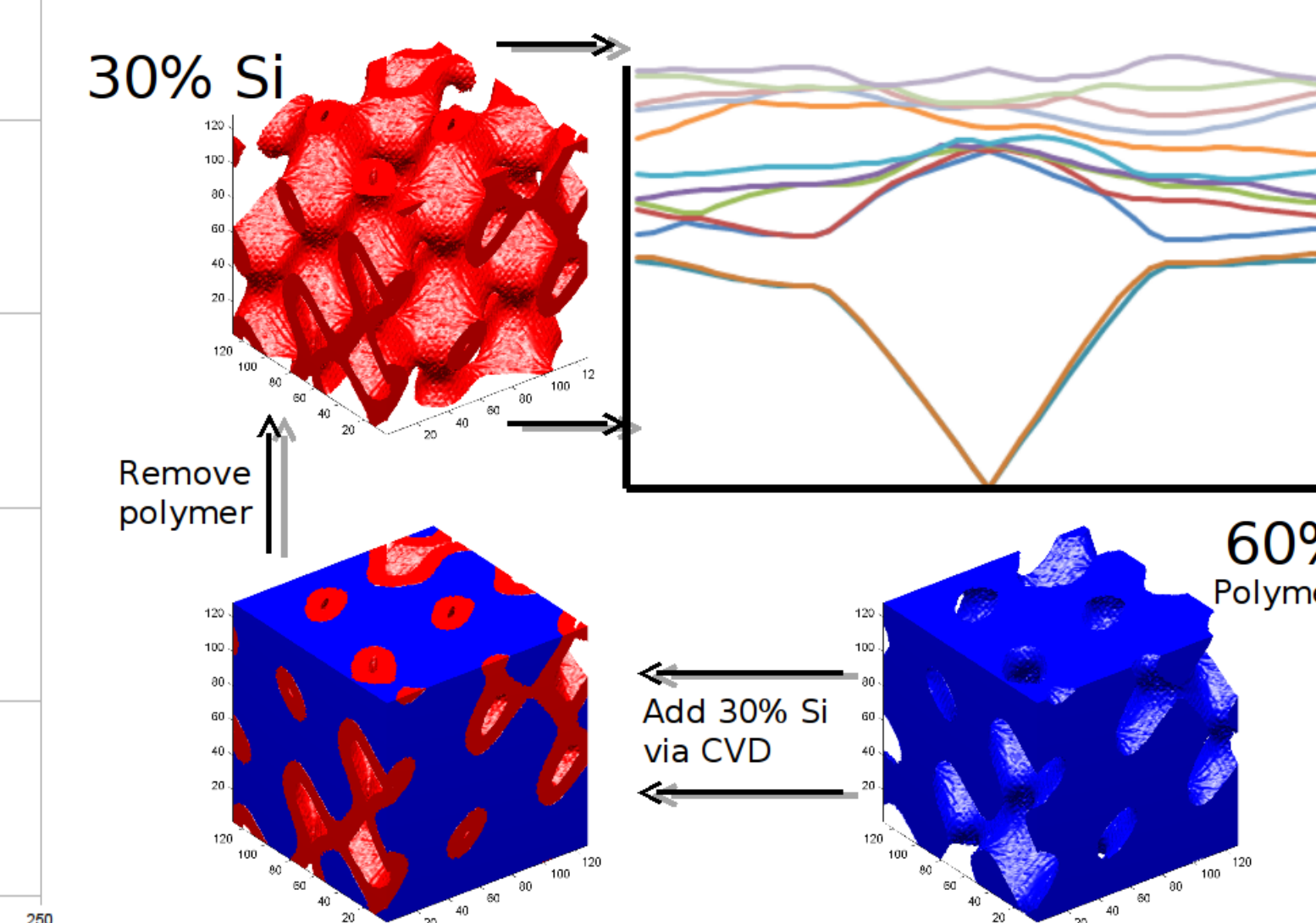
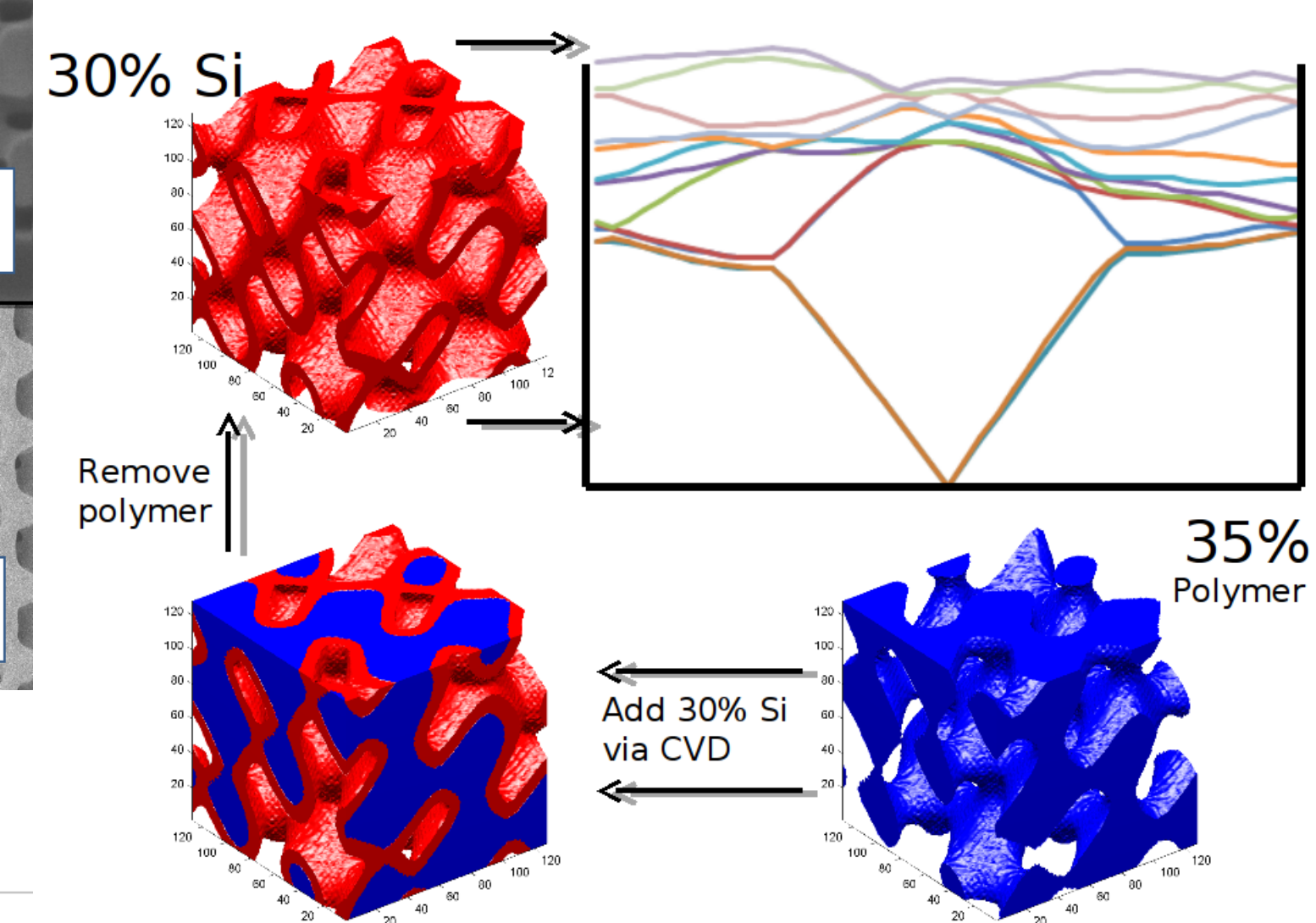
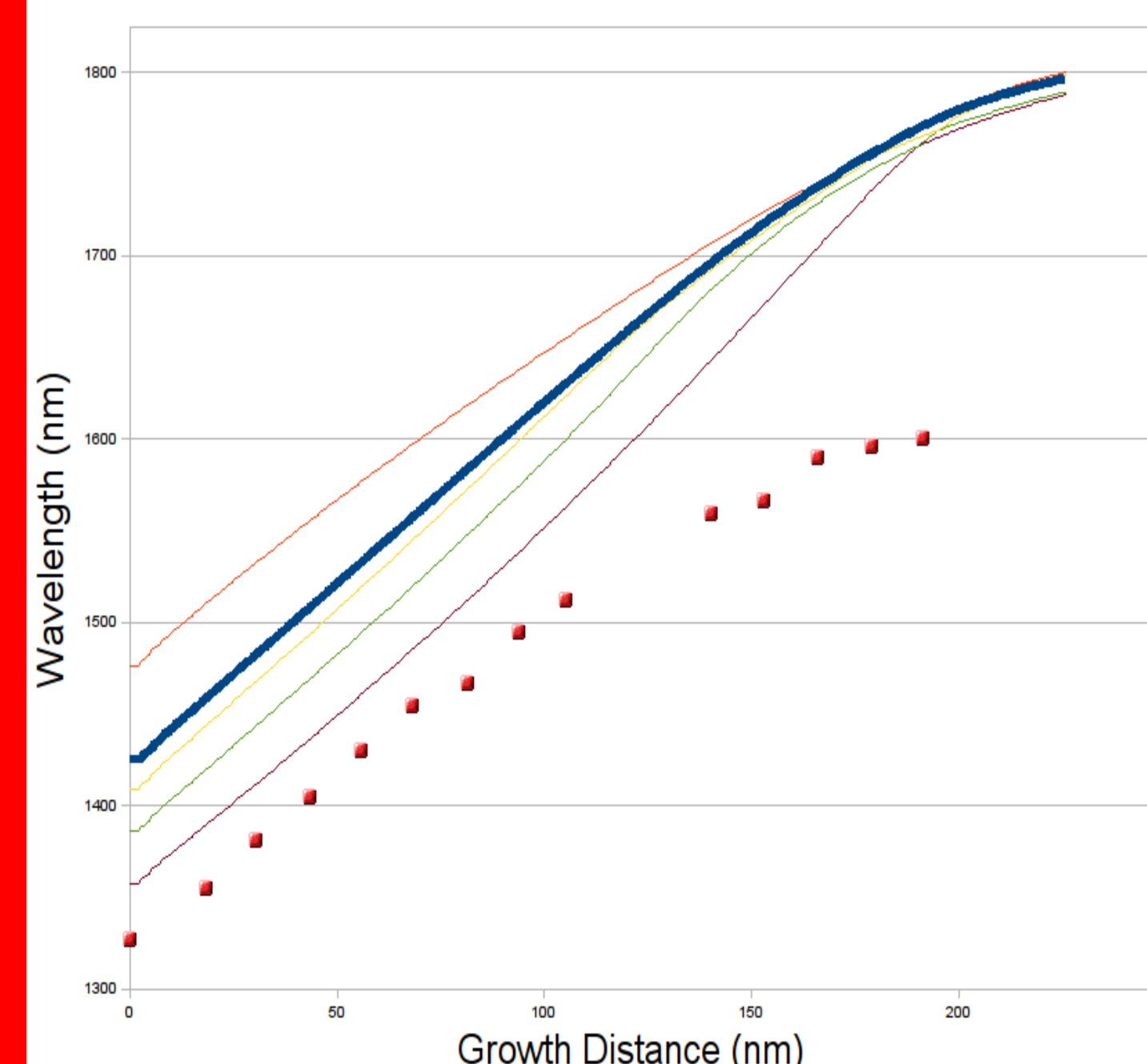
$$\text{Intensity} = \left| \sum_{i=1}^4 \vec{E}_i e^{i\vec{k}_i \cdot \vec{r}} \right|^2$$

Produces pattern in SU8 photopolymer

Above threshold polymer crosslink; below dissolved.



Bragg-Peak Approximation and L-point Band-Edge versus Conformal Growth



Density of States versus Energy and Angle

